

## Chapter Six

### *Supply, Demand, and Government Policies*

#### 一、名词解释 (SOLUTIONS TO Key Concepts):

##### 1. price ceiling

价格上限指的是一种物品出售时所能够达到的最高法定价格。政府通常制订一些商品的价格上限，例如为了保障贫困居民的住房而制订的房屋出租价格上限、春运期间制订的汽车票价格上限等。这些价格上限往往都低于市场在没有价格限制下达到的均衡价格，往往会降低市场效率，减少消费者和生产者的剩余。

##### 2. price floor

价格下限指的是一种物品出售时所能够达到的最低法定价格。例如政府制订的农产品价格下限、最低工资标准等。一般情况下，价格下限都高于市场在没有限制情形下达到的均衡价格。价格下限通常会使得这种物品的供给量大于其需求量，减少消费者和生产者的总剩余，降低市场的效率。

##### 3. tax incidence

税收归宿主要研究由谁来承受税收的负担问题。税收归宿亦称“税负归宿”、“赋税归宿”、“课税归宿”。它主要用来研究全部税收负担最后是由谁来承担的。国家对纳税人课税，其税负的归宿结果有三种情况：一是纳税人将所缴纳的税款，通过转嫁使税负最终落在负税人身上；二是税负无法转嫁而由纳税人自己承担；三是转嫁一部分，纳税人自己承担一部分。不管出现何种情形，税负总是要由一定的人来承担，归属于一定的人身上。

#### 二、问答题 (PROBLEMS and Applications) :

1. Lovers of classic music persuade Congress to impose a price ceiling of \$40 per ticket. Does this policy get more or fewer people to attend classical music concerts?

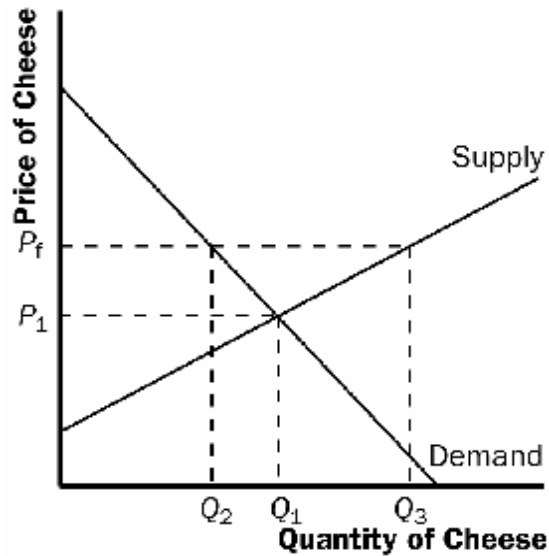
答：如果原来均衡状态下的票价低于 40 美元一张，这对于人们没有任何影响。如果原来的票价高于 40 美元一张，则制订 40 美元的价格上限，音乐会门票的需求量就会大于其供给量，造成门票短缺。此时音乐会的供给量减少，从而引起能去看音乐会的人数的减少。

2. The government have decided that the free-market price of cheese is too low .

a. Suppose the government imposes a binding price floor in the cheese market. Use a supply-and-demand diagram to show the effect of this policy on the price of cheese and the quantity of cheese sold . Is there a shortage or surplus of cheese?

b. Farmers complain that the price floor has reduced their total revenue . Is this possible ? Explain.

c. In response to farmers' complaints, the government agrees to purchase all of the surplus cheese at the price floor . Compared to the basic price floor , who benefits from this new policy? Who



loses?

答: a.

由题意, 如上图所示, 当政府制订价格下限的时候, 制订的价格高于原来均衡状态下的价格。这时候销售量下降, 因为需求者减少。供给的奶酪数量大于需求的奶酪数量, 存在着生产过剩。

b. 农民抱怨价格下限减少了他们的总收益, 这只有在需求以及供给都富有弹性的情况下才成立, 这样价格上限提高的价格的百分比就会小于均衡数量下降的百分比, 最终引起总收益的下降。

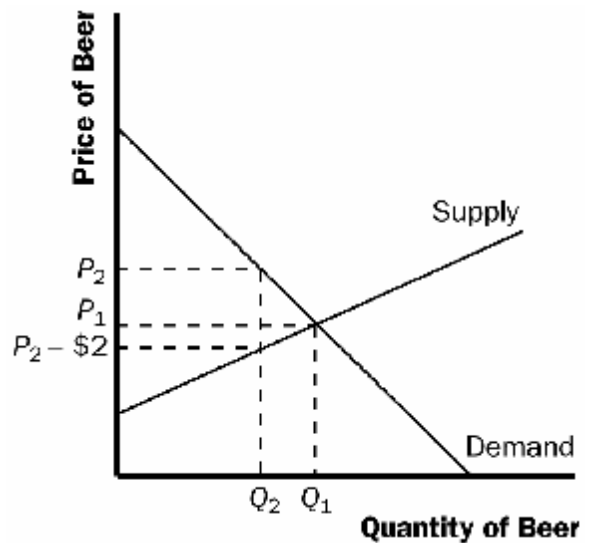
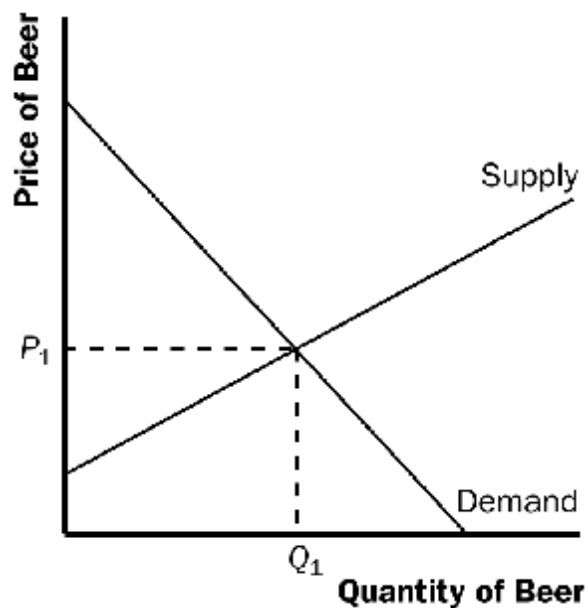
c. 农民会从这种新政策中获益, 他们生产更多的数量, 而且卖的价格也更高, 从而获得更高的总收益。受损失的是要为这项政策支付税收的纳税者以及消费者。

3. Suppose the federal government requires beer drinkers to pay a \$2 tax on each case of beer purchased. (In fact, both the federal and state government impose beer taxes of some sort)

a. Draw a supply-and-demand diagrams of the market for beer without the tax. Show the price paid by consumers, the price received by producers, and the quantity of beer sold. What is the difference between the price paid by consumers and the price received by producers.

b. Now draw a supply-and-demand diagram for the beer market with tax. Show the price paid by the consumers, the price received by producers, and the quantity of beer sold. What is the difference between the price paid by the consumers and the price received by producers? Has the quantity of beer sold increased or decreased?

答: a. 由题意, 如图所示



在没有税收的情况下，假设需求曲线与供给曲线如上，这均衡状态下消费者与生产者面对的价格相同均为  $P_1$ ，而均衡状态的啤酒数量为  $Q_1$ 。

b. 在政府对每单位啤酒征收 2 美元税收的情况下，新的均衡状态如上边右图所示，此时消费者支付价格  $P_2$ ，而生产者获得价格为  $P_2 - 2$  美元，此时能够卖出的啤酒数量为  $Q_2$ ，相对于原来下降。

4. If the government places a \$500 tax on luxury cars , will the price paid by consumers rise by more than \$500,less than \$500 ,or exactly \$500? Explain.

答：如果对豪华汽车征收 500 美元的税收的话，消费者最终支付的价格上涨数量会小于 500 美元。生产者最终获得的价格也小于原来均衡状态下的价格，因此这 500 美元税收是由生产者和消费者共同来支付的。当然，如果在这样一种特例下，亦即供给曲线完全垂直的话，消费者就会支付全部 500 美元的税收额。

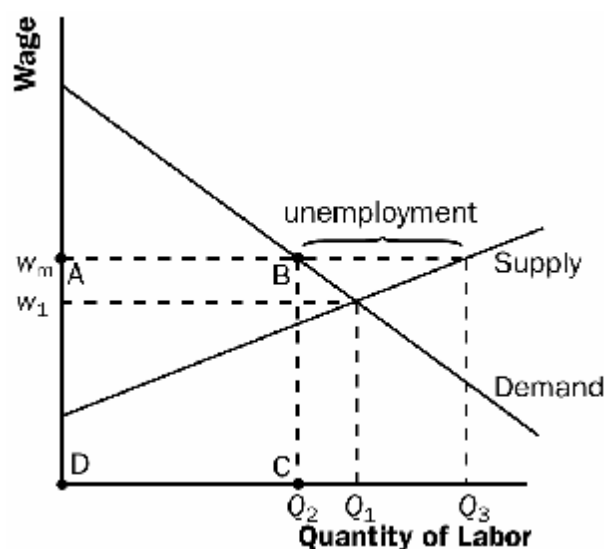
5. A case study in this chapter discusses the federal minimum-wage law.

a. Suppose the minimum wage is above the equilibrium wage in the market for unskilled labor . Using a supply-and-demand diagram of the market for unskilled labor, show the market wage , the number of workers who are employed , and the number of workers who are unemployed . Also show the total wage payments to unskilled workers.

b. Now suppose the secretary of labor proposes an increase in the minimum wage. What effect would this increase have on employment ? Does the change in employment depend on the elasticity of demand , the elasticity of supply, both elasticities, or neither?

c. What effect would this increase in the minimum wage have on unemployment ? Does the change in unemployment depend on the elasticity of demand, the elasticity of supply, both elasticities , or neither?

d. If the demand for unskilled labor were inelastic, would the proposed increase in the minimum wage raise or lower total wage payments to unskilled workers? Would your answer change if the demand for unskilled labor were elastic?



答：a. 假设如上边左图所示，在不存在最低工资发时，不熟练工人的就业数量为  $Q_1$ ，在市场上获得工资为  $W_1$ 。如果联邦政府制订最低工资为  $W_m$  的工资，则此时劳动力的供给量大于其需求量，市场的工资此时即为政府制订的最低工资，就业的工人数量为  $Q_2$ ，失业工人数量为  $Q_3 - Q_2$ 。不熟练工人此时获得的总工资为矩形 ABCD 的面积。

b. 假如最低工资提高的话，就业人数就会减少，由于存在着失业工人，所以这种失业工人的变化数量仅仅取决于需求弹性，和供给弹性没有关系。

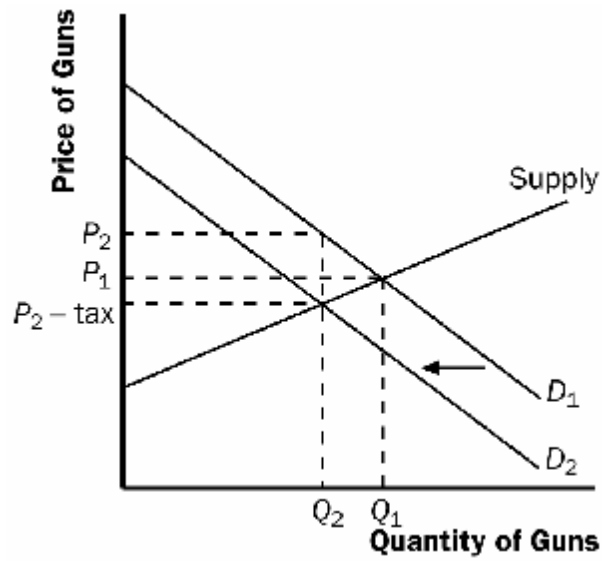
c. 这种最低工资的提高会增加失业工人的数量，增加的数量同时取决于劳动的需求弹性和供给弹性，因为失业的工人数量等于劳动者供给量减去就业的劳动者数量，所以它和两个弹性都有关系。

d. 如果不熟练劳动者的需求缺乏弹性的话，最低工资的提高只会减少少量的劳动力需求量，从而不熟练劳动者获得的总收入会提高；相反，如果需求富有弹性的话，工资的提高会引起劳动力需求量大幅度的下降，最终使得其获得的总收入下降。

6. Consider the following policies , each of which is aimed at reducing violent crime by reducing violent crime by reducing the use of guns , Illustrate each of these proposed policies in a supply-and-demand diagram of the gun market .

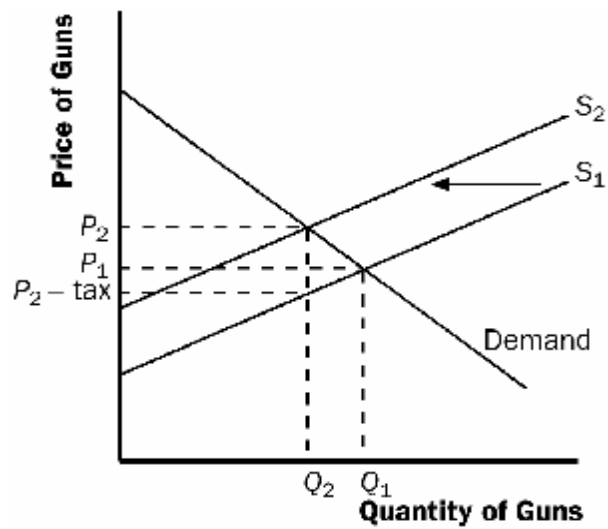
- a tax on gun buyers
- a tax on gun sellers
- a price floor on guns
- a tax on ammunition

答：a 对买者征税的情形如下图



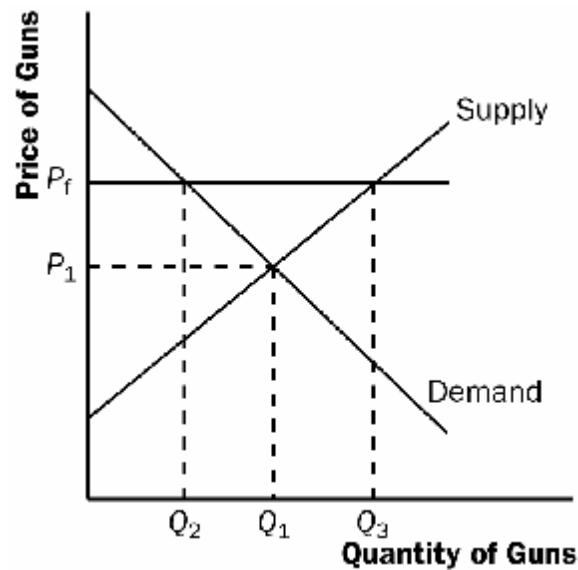
此时，购买者的需求曲线由  $D_1$  移动到  $D_2$ ，枪支消费量会减少到  $Q_2$  数量。

b. 对枪支销售者征税的话，如下图



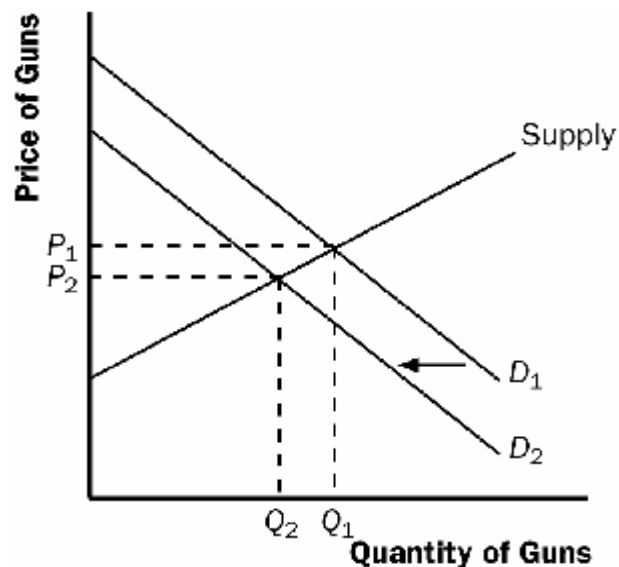
生产者的供给曲线由  $S_1$  移动到  $S_2$ 。而枪支消费量下降到  $Q_2$  数量。

c. 若对枪支实行价格下限



这需求量下降为  $Q_2$  数量，且形成  $Q_3 - Q_2$  的生产过剩。

d. 假如对弹药征税

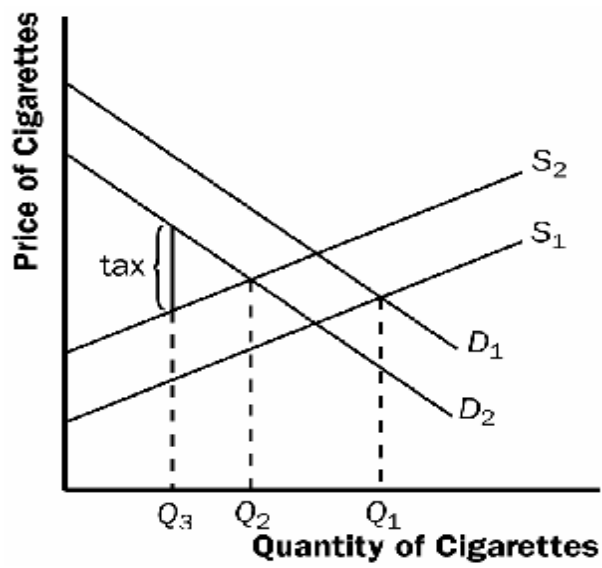


由于弹药和枪支是互补品，此时枪支的需求会下降，如同对枪支直接征税的情形。

7. The U.S. government administers two programs that affect the market for cigarettes . Media campaigns and labeling requirements are aimed at making the public aware of the dangers of cigarette smoking . At the same time , the Department of Agriculture maintains a price –support program for tobacco farmers , which raises the price of tobacco above the equilibrium price .

- How do these two program affect cigarette consumption? Use a graph of the cigarette market in your answer.
- What is the combined effect of these two program on the price of cigarette?
- Cigarette are also heavily taxed . What effect does this tax have on cigarette consumption?

答：a. 宣传吸烟的危害，会减少香烟的需求；同时实行高于均衡价格的最低均衡价格控制，两个政策对香烟市场的影响如下图，此时香烟的消费量会由  $Q_1$  减少到  $Q_2$ 。



- b. 这两种计划对香烟价格的综合影响是不确定的，公众需求的减少会降低香烟的价格，同时最低价格控制会提高香烟的价格，最终价格取决于两者的相对的大小。
- c. 征税的话减少了香烟的消费，具体减少量如上图所示。